ELECTROLESS DEPOSITION METHODS AND SYSTEMS

ABSTRACT OF THE DISCLOSURE

Methods and systems for depositing metal patterns on a substrate are provided. Accordingly, an electroless active layer can be formed on a substrate. Ink-jet techniques can then be used to independently ink-jet at least two components of an electroless deposition composition onto a variety of substrates. A metal composition can be ink-jetted onto the electroless active layer. The metal composition can contain a metal salt and optional additives. A reducing agent composition can be ink-jetted either subsequent to or prior to ink-jetting of the metal composition to form an electroless composition on the substrate. The metal salt and reducing agent react to form a metal pattern which can be used in formation of electronic devices or other products. The described ink-jettable compositions are stable over a wide range of conditions and allow for wide latitude in ink-jet formulations and choice of substrates.

20

25